

# EDS-QR™

## Electron Donor Solution – Quick Release



- *EDS-QR™* is a soluble source of readily available organic carbon and hydrogen
- It complements other Tersus products such as *EDS-ER™*
- This product “jump starts” bacterial growth: ideal choice for projects on a fast track
- 60 lbs. of *EDS-QR™* provides the same amount of hydrogen as 100 lbs. of sodium lactate.
- One dose typically enhances biological activity for 2-3 months

### Principle

*EDS-QR™* (electron donor solution – quick release) is a fast-acting, completely soluble amendment engineered for enhanced reductive dechlorination of chlorinated solvents or any other anaerobically degradable substance. Our *EDS-QR™* product is USP Kosher Grade 99.7% purity USA sourced from an ISO Certified Plant. A key benefit is that *EDS-QR™* provides more electron equivalence per pound than sodium lactate, so you buy and ship less product. With 99.7% organic carbon, 60 lbs. of *EDS-QR™* provides the same amount of carbon as 100 lbs. sodium lactate. *EDS-QR™* is an ideal choice for projects that are on a fast track. One injection will typically enhance biological activity for 2 to 3 months

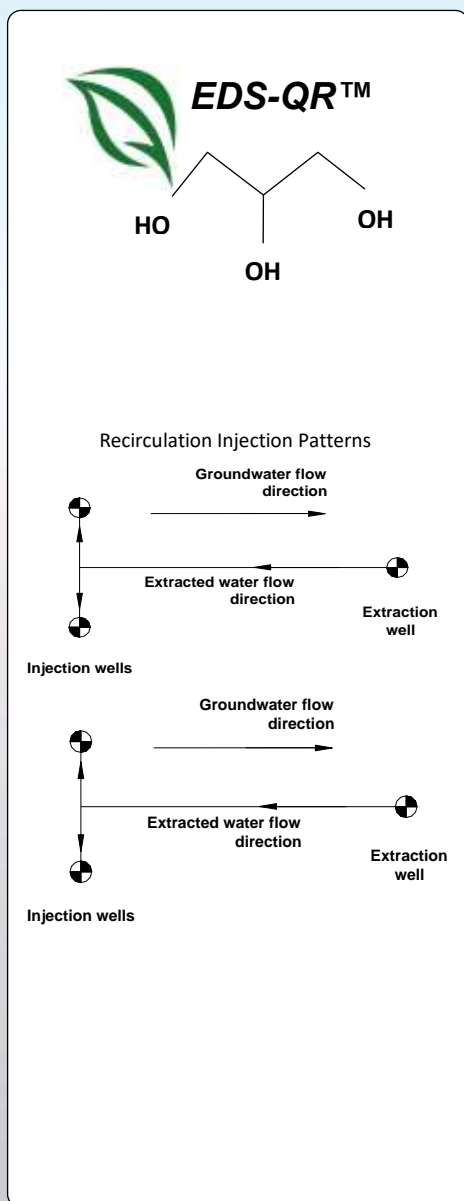
One in the aquifer, *EDS-QR™* decomposes to fatty acids and hydrogen used by organohalide respiring bacteria as they transform toxic chlorinated substances such as PCE, TCE, DCE, VC, TCA, CT, and perchlorate. *EDS-QR™* creates a reducing environment to bioremediate explosives (i.e., aromatic nitrates and energetic munitions residuals), nitrates, acids, radionuclides, select oxidized heavy metals, and other contaminants.

### Advantages

- Short-lived electron donor allows fast geochemical conditioning
- Used in recirculation systems and low permeability zones
- Conforms to EPA’s EPP (Environmentally Preferable Purchasing) and USDA bio-based criteria
- Made from renewable USA-grown crop-based oils
- Ideal for salt-sensitive aquifers

### Field Application Design

*EDS-QR™* applications are easily tailored to meet site-specific conditions. Typical configurations include distributing *EDS-QR™* until the target zone meets 50 mg/L of TOC. Grid and barrier patterns are also common approaches, as well as applications in excavations or trenches. In these scenarios, *EDS-QR™* is typically 20% of a slow release electron donor such as *EDS-ER™*, allowing rapid conditioning of the aquifer while the slow release electron donor becomes effective. *EDS-QR™*’s low viscosity allows for subsurface distribution through well-pair recirculation systems, direct-push injection points or hollow-stem augers, and it can also be pumped through existing wells. *EDS-QR™* is shipped as a ready-to-use concentrate that can be diluted with water in the field.



## Product Content

Chemical Name	CAS Number	Composition (% wt.)
Glyceride oils	56-81-5	>99

## Product Characteristics

Parameter	Specification
Specific Gravity	1.26 @ 25 °C
Solubility in water	miscible
Flash Point	390 °F (199 °C)
Appearance	yellowish translucent oil

## Packaging Options

- 55-gallon poly drums
- 275-gallon IBC containers
- 5,000-gallon tankers

## Safety

No protective equipment is necessary under normal use conditions. All ingredients consist of food or food grade additives.